

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Peter Hua-Tang Tang; Ton : Paper No:
de Grauw; Michael V. Miles

Serial No. : Group Art Unit:

Filed: : Examiner:

For: Electrochemical Analysis of CoEnzyme Q₁₀ and Reduced CoEnzyme Q₁₀

JC821 U.S. PTO
10/090347
03/04/02

INFORMATION DISCLOSURE STATEMENT

THE ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Dear Sir:

In accordance with 37 C.F.R. §§1.97 and 1.98, Applicant herewith submits certain patent references and other information, which the Patent & Trademark Office may wish to consider in examining the above-identified application. The references and information are provided below, and are also listed on the attached Form PTO-1449.

<u>REFERENCES</u>	<u>INVENTOR</u>	<u>ISSUE DATE</u>
4,511,659	Matson, Wayne R.	April 16, 1985
4,863,873	Matson, Wayne R.	Sept. 5, 1989
5,011,608	Damjanovic, Dragana	April 30, 1991
5,104,639	Matson, Wayne R.	April 14, 1992
5,726,565	Uchiyama, Shunichi, et al.	Mar. 10, 1998

OTHER REFERENCES

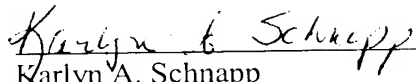
1. Takada, M., Ikenoya, S., Yuzuriha, T., and Katayama, K. Simultaneous Determination of Reduced and Oxidized Ubiquinones. *Method.Enzy.*1984, 105: 147-155.
2. Lang, J.K., Gohil, K., and Packer, L. Simultaneous Determination of Tocopherols, Ubiquinols, and Ubiquinones in Blood, Plasma, Tissue Homogenates, and Subcellular Fractions. *Anal. Biochem.* 1986, 157: 106-116.
3. Edlund, P.O. Determination of CoEnzyme Q₁₀, C- Tocopherol and Cholesterol in Biological Samples by Coupled-Column Liquid Chromatography with Coulometric and Ultraviolet Detection. *J.Chrom.* 1988, 425: 87-97.
4. Okamoto, T., Fukunaga, Y., Ida, Y., and Kishi, T. Determination of Reduced and Total Ubiquinones in Biological Materials by Liquid Chromatography with Electrochemical Detection, *J. Chrom B*, 1988, 430: 11-19.

5. Grossi, G., Bargossi, A.M., Fiorella, P.L., and Piazzzi, S. Improved High-Performance Liquid Chromatographic Method for the Determination of Coenzyme Q10 in Plasma. *J.Chrom* 1992, 593: 217-226.
6. Wakabayashi, H., Yamato, S., Nakajima, M., and Shimada, K. Simultaneous Determination of Oxidized and Reduced Coenzyme Q₁₀ and C-Tocopherol in Biological samples by High Performance Liquid Chromatography with Platinum Catalyst Reduction and Electrochemical Detection. *Biol. Pharm. Bull.* 1994, 17:997-1002.
7. Finckh, B., Kontush, A., Commentz, J., Hubner, C., Burdelski, M., and Kohlschutter, A. Monitoring of Ubiquinol-10, Ubiquinone-10, Carotenoids, and Tocopherols in Neonatal Plasma Microsamples Using High-Performance Liquid Chromatography with Coulometric Electrochemical Detection. *Anal. Biochem.* 1995, 232: 210-216.
8. Lagendijk, J., Ubbink, J.B., Delport, R., Hayward, W. J., and Human J.A. Measurement of the Ratio Between the Reduced and Oxidized forms of CoQ₁₀ in Human Plasma as a Possible Marker of Oxidative Stress. *J.Lip.Res.* 1996, 37:67-75.
9. Yamashita S., and Yamamoto, Y., Simultaneous Detection of Ubiquinol and Ubiquinone in Human Plasma as a Marker of Oxidative Stress. *Anal Biochem* 1997, 250: 66-73.
10. Kaikkonen, J., Nyysönen, K., and Salonen, J.T. Measurement and Stability of Plasma Reduced, Oxidized and Total Coenzyme Q₁₀ in Humans. *Scan J. Clin Lab Invest.* 1999, 59: 457-466.
11. Wang, Q., Lee, B.L., and Ong, C.N.: Automated High-Performance Liquid Chromatographic Method with Pre-column Reduction for the Determination of Ubiquinol and Ubiquinone in Human Plasma. *J.Chrom. B.* 1999, 726: 297-302
12. Tang, Peter H., Miles, Michael V., DeGrauw, Antonius, Steele, Paul E., Hershey, Andrew, Schroer, Laura, Chuck, Gail, Jones, Jeanne, and Pesce, Amadeo. Simple and Rapid HPLC Method with Coulometric Detection of Coenzyme Q₁₀ in Human Plasma and CSF. OASYS, Paper No. 387537.
13. Tang, Peter H., Miles, Michael V., DeGrauw, Antonius, Hershey, Andrew, and Pesce, Amadeo. HPLC Analysis of Reduced and Oxidized Coenzyme Q₁₀ in Human Plasma. *Clinical Chemistry*, 2001, Volume 47 No. 2:256-265.

Copies of all listed patents and references are attached. No representation is made or intended that a prior art search has been made or that no better art than the listed is available. It is respectfully requested that the information be considered by the Examiner and made of record in the present application.

Serial No.

The Assistant Commissioner for Patents is authorized to charge any deficiency or credit any overpayment to Frost Brown Todd LLC Deposit Account No. 06-2226.

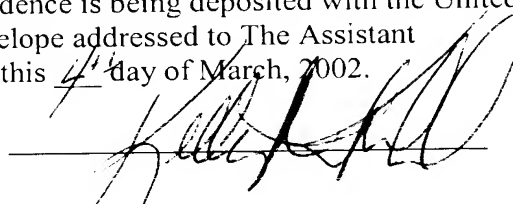

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March 4, 2002

CERTIFICATE OF MAILING

I hereby certify that a copy of this correspondence is being deposited with the United States Postal Service as EXPRESS MAIL in an envelope addressed to The Assistant Commissioner of Patents, Washington, D.C. 20231 this 4 day of March, 2002.



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FORM PTO-1449									ATTY. DOCKET		SERIAL NO.	
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT									APPLICANT		Lang, Peter Hua-Lang, et al	
									FILING DATE		GROUP	
Exam Init.		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS
		4	5	1	1	6	5	9	April 16, 1985	Wayne R. Matson	436/150	
		4	8	6	3	8	7	3	Sept. 5, 1989	Wayne R. Matson	436/63	
		5	0	1	1	6	0	8	April 30, 1991	Dragana Damjanovic	210/656	
		5	1	0	4	6	3	9	April 14, 1992	Wayne R. Matson	424/2	
		5	7	2	6	5	6	5	Mar. 10, 1998	Shunichi Uchiyama et al	324/94	
FOREIGN PATENT DOCUMENTS												
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS
OTHER ART (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)												

1. Takada, M., Ikenoya, S., Yuzuriha, T., and Katayama, K. Simultaneous Determination of Reduced and Oxidized Ubiquinones. *Method.Enzy.* 1984, 105: 147-155.
2. Lang, J.K., Gohil, K., and Packer, L. Simultaneous Determination of Tocopherols, Ubiquinols, and Ubiquinones in Blood, Plasma, Tissue Homogenates, and Subcellular Fractions. *Anal. Biochem.* 1986, 157: 106-116.
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5. Grossi, G., Bargossi, A.M., Fiorella, P.L., and Piazzzi, S. Improved High-Performance Liquid Chromatographic Method for the Determination of Coenzyme Q₁₀ in Plasma. *J.Chrom* 1992, 593: 217-226.
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10. Kaikkonen, J., Nyysönen, K., and Salonen, J.T. Measurement and Stability of Plasma Reduced, Oxidized and Total Coenzyme Q₁₀ in Humans. *Scan J. Clin Lab Invest.* 1999, 59: 457-466.
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EXAMINER _____

DATE CONSIDERED _____

Page ____ of

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.